

**Notice of Allowability**

Application No.

10/772,999

Applicant(s)

LONG ET AL.

Examiner

Art Unit

Mark Tsidulko

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 4/11/2006.
2. ☒ The allowed claim(s) is/are 11,12,15,16,19-41 and 46-54.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|   | 9. <input type="checkbox"/> Other _____   |

### **DETAILED ACTION**

The submission of amendment filed on 4/11/2006 is acknowledged. At this point claim 12 has been amended, claims 1-10, 13, 14, 17, 18, 42-45 have been canceled and the remaining claims left unchanged. Thus, claims 11, 12, 15, 16, 19-41, 46-54 are at issue in the instant application.

#### ***Allowable Subject Matter***

Claims 11, 12, 15, 16, 19-41, 46-54 are allowed.

The following is an examiner's statement of reasons for allowance:

Referring to Claim 11 the prior art of record fails to show a light integrating system having a plurality of TIR prisms, wherein the plurality of the TIR prisms are disposed along an optical axis and wherein each subsequent TIR prism has a steeper angle than a previous TIR prism along the optical axis.

Referring to Claim 12 the prior art of record fails to show a light integrating system including a plurality of TIR prisms disposed along an optical axis and having a first set of the light sources disposed along one side of the line of TIR prisms and a second set of the light sources disposed along an opposite side of the line of TIR prisms.

Claim 52 is allowed as claim depended on claim 11.

Claim 53 is allowed as claim depended on claim 12.

Referring to Claim 15 the prior art of record fails to show a light integrating system wherein a first plurality of TIR prisms is disposed along an optical axis and a second plurality of

Art Unit: 2875

TIR prisms is arranged along the first plurality of TIR prisms, but not on the optical axis of the first plurality of TIR prisms and each of the second plurality of TIR prisms is disposed adjacent to and optically coupled to one of the first plurality of TIR prisms.

Claim 16 is allowed as claim depended on claim 15.

Referring to Claims 19, 46, 54 the prior art of record fails to show a light integrating system including a first light source emitting a substantially white projection beam that is color-deficient over one or more specific portions of a visible spectrum and a second light source provided frequencies matching one or more of the portions of the visible spectrum over which the first light source is deficient, wherein the integrating light from the first and second light sources provides a projection beam in which the color deficiency of the first light source is corrected by the second light source.

Claim 20 is allowed as claim depended on claim 19.

Claims 47, 48 are allowed as claims depended on claim 46.

Referring to Claim 21 the prior art of record fails to show a light integrating system including at least one TIR prism disposed along an optical axis, receiving a light from two different directions from two different light sources and a reflector disposed along the optical axis and reflecting light back through TIR prism and down the optical axis.

Claims 22-26 are allowed as claims depended on claim 21.

Referring to Claims 27, 49 the prior art of record fails to show a light integrating system including at least one TIR prism and a reflector disposed along the optical axis and reflecting light back through TIR prism and down the optical axis.

Claims 50, 51 are allowed as claims depended on claim 49.

Art Unit: 2875

Referring to Claims 28, 29 the prior art of record fails to show a light integrating system including a plurality of TIR prism and a reflector disposed along the optical axis and reflecting light back through TIR prism and down the optical axis.

Claim 30 is allowed as claim depended on claim 29.

Referring to Claim 31 the prior art of record fails to show a light integrating system having a first plurality of TIR prisms disposed along an optical axis and a second plurality of TIR prisms each of which is disposed adjacent and optically coupled with one of the first plurality of TIR prisms, and two light sources disposed with each of the second plurality of TIR prisms.

Claims 33-36 are allowed as claims depended on Claim 31.

Referring to Claim 32 the prior art of record fails to show system having first plurality and a second plurality of the TIR prisms and two light sources disposed with each of the second plurality of TIR prisms, wherein each of the second plurality of prisms receives and integrates light from two light sources.

Referring to Claim 37 the prior art of record fails to show system including a first plurality of TIR prisms disposed along an optical axis and a second plurality of TIR prisms each of which is disposed adjacent to and optically coupled with one of the first plurality of TIR prisms and a plurality of optical elements optically coupled along an optical axis, wherein TIR prisms are formed at interfaces between two of the optical elements.

Referring to Claim 39 the prior art of record fails to show a light projecting system including a first light source which is a projection lamp and the second light source which is a colored light source and a TIR prism receiving light from two light sources.

Art Unit: 2875

Claims 40, 41 are allowed as claims depended on Claim 39.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Tsidulko whose telephone number is (571)272-2384. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300 for all communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/772,999

Page 6

Art Unit: 2875

M.T.

May 31, 2006



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